

PUBLICATIONS  
OF THE  
AMERICAN  
ECONOMIC ASSOCIATION

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VOLUME IX

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AMERICAN ECONOMIC ASSOCIATION

1894

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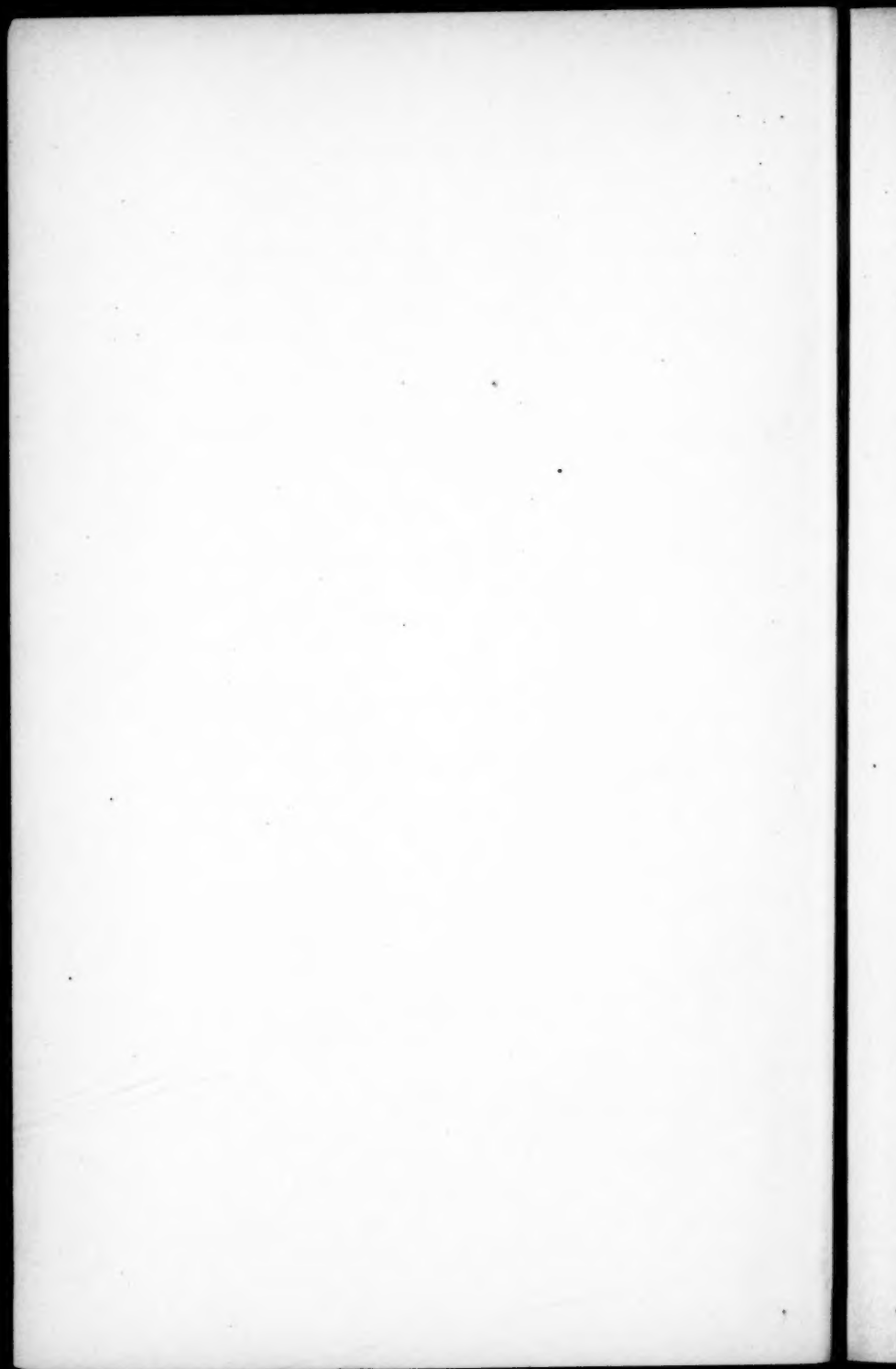
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HAND-BOOK  
OF THE  
AMERICAN ECONOMIC ASSOCIATION  
1894  
TOGETHER WITH  
REPORT OF THE  
FIFTH ANNUAL MEETING

University of Chicago, September 11-15, 1893

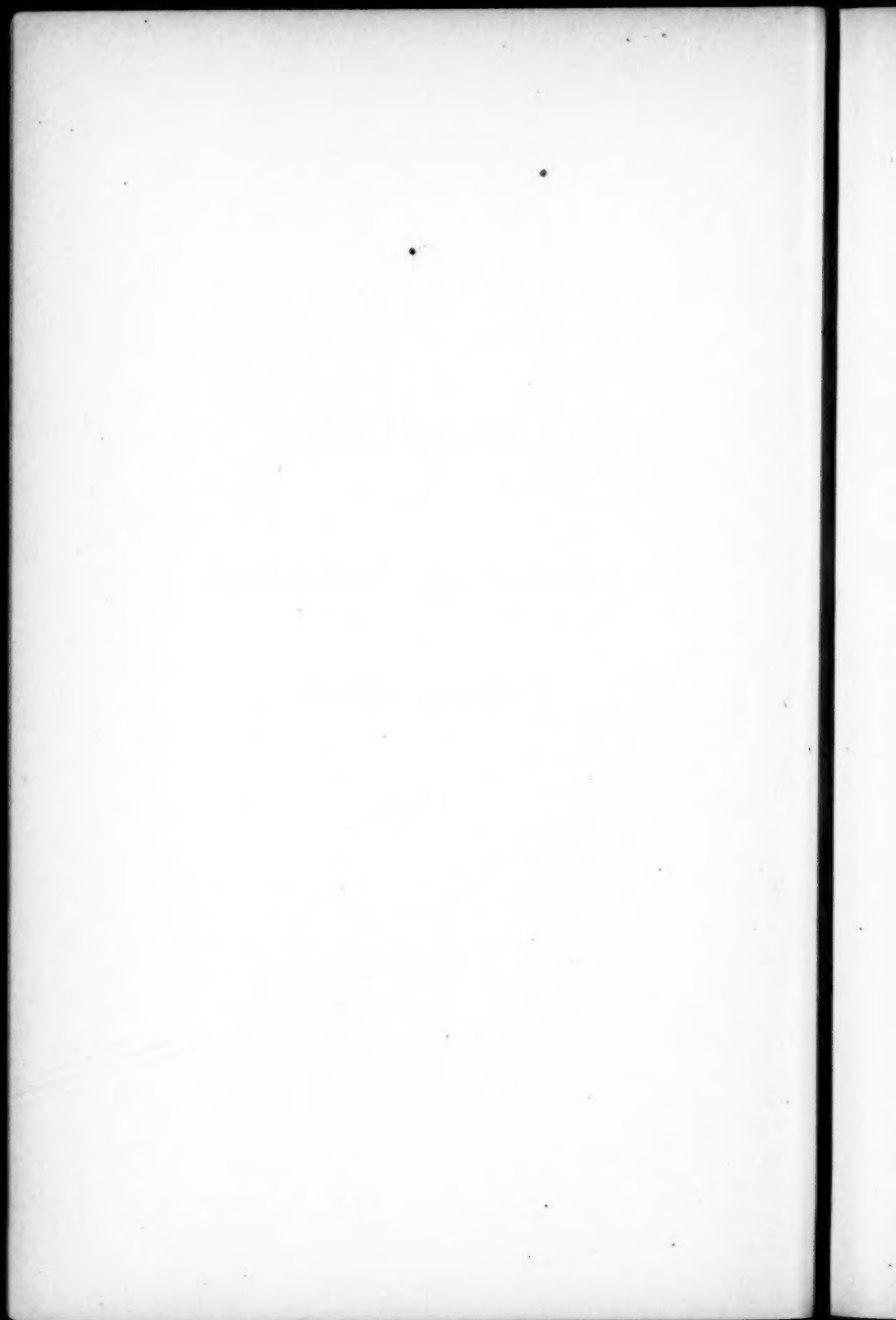
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AMERICAN ECONOMIC ASSOCIATION

January, 1894

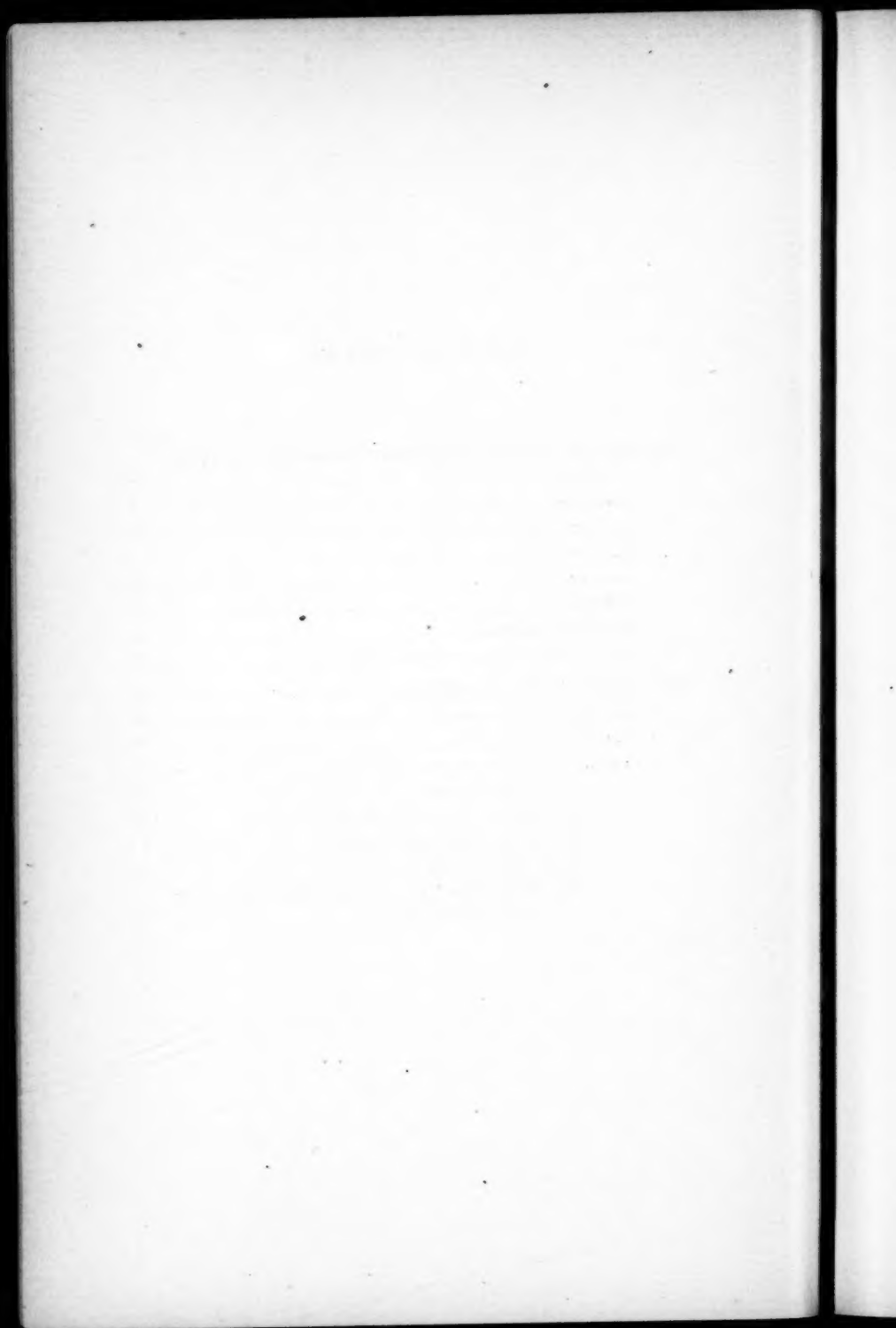
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Hand-Book  
of the  
American Economic  
Association,  
1894.



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## Hand-Book of the American Economic Association,

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The American Economic Association was organized on the 9th of September, 1885, at Saratoga, for two well defined, yet closely connected, purposes. These were: First, scientific study of social and economic problems; and, second, the popular diffusion of knowledge with regard to them.

In order to accomplish these ends there was needed a union not only of scientific men, but of others interested in political and social science. Accordingly, members were sought from all occupations, with the gratifying result that men of all shades of opinion on social and economic questions, drawn from nearly every department of social and business life, have united with the Association and met at its annual meetings for discussion and exchange of views. The membership of the Association at present is approximately 800, and its influence is constantly spreading.

The Association has issued monographs upon important topics at regular intervals since its organization. Six numbers are published yearly, and these contain the best work of the leading thinkers on economic questions in this country. For titles of the monographs so far published, see back cover of this hand-book.

Any person may become a member of the Association upon payment of three dollars annually. A life

membership may be secured by payment of fifty dollars. Members are entitled to all publications issued by the Association. Libraries and other organizations, may secure the publications by paying an annual subscription of four dollars.

### *Prizes.*

Excellent results have been obtained from the prizes offered through the Association by generous friends interested in economic research. Five prizes have thus far been offered, which have been awarded as follows:

A prize of \$150, presented by the journal *America* for the best essay on the subject of "The Evils of Unrestricted Immigration," was awarded to Mr. Richard D. Lang, of Baltimore.

A prize of \$100, offered by Mrs. John Armstrong Chanler (Amélie Rives), was, after full consideration, divided between Miss Clare de Graffenried of the Department of Labor, Washington, and Mr. W. F. Willoughby, also of Washington, and since connected with the Department of Labor. These essays were published.

The sum of \$500 was offered for the best essays on "Women Wage Earners," to be divided into a first prize of \$300 and a second prize of \$200. The former was won by Miss Clare de Graffenreid.

A prize of \$250, offered by Mr. Thomas G. Shearman of Brooklyn for the best essay on "State and Local Taxation," was won by Mr. S. M. Dick, then of the University of Michigan.

In 1892, the sum of \$500 was offered for essays on "The Housing of the Poor in American Cities," to



be divided into a first prize of \$300 and a second prize of \$200. The former was won by Mr. Marcus T. Reynolds of New York, whose essay has recently been published as one of the monographs of the Association.

The usefulness of such prizes can hardly be overestimated. They not merely furnish to the public the results of careful investigation on important subjects, but stimulate work on economic lines in all of our colleges and universities and enable promising young students to make their abilities known. The prizes are, of course, for such younger investigators, in the main, rather than for economists of established reputation. Though it has not been deemed advisable in every case to publish the successful essay, those which have been so published by the Association have proved to be among its most useful and popular monographs.

### *Publication Fund.*

The Association wishes to extend its work as far as possible along the lines of economic research and of the popularization of economic knowledge. Besides the publication of monographs discussing questions of the day, it proposes to publish works of high scientific value, which, owing to their limited sale, ordinary publishers can hardly venture to bring out. To this end, if the funds of the Association would permit, the number of regular monographs might profitably be increased. For these purposes a large increase in our membership roll is desirable; or the result could be much sooner attained through the establishment of a fund given by persons interested in such work.

## *Constitution.*

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### ARTICLE I.

#### NAME.

This Society shall be known as the AMERICAN ECONOMIC ASSOCIATION.

### ARTICLE II.

#### OBJECTS.

1. The encouragement of economic research, especially the historical and statistical study of the actual conditions of industrial life.
2. The publication of economic monographs.
3. The encouragement of perfect freedom of economic discussion. The Association, as such, will take no partisan attitude, nor will it commit its members to any position on practical economic questions.
4. The establishment of a bureau of information designed to aid members in their economic studies.

### ARTICLE III.

#### MEMBERSHIP.

Any person may become a member of this Association by paying three dollars, and after the first year may continue a member by paying an annual fee of three dollars. On payment of fifty dollars any person may become a life member, exempt from annual dues.\*

\*NOTE.—Each member shall be entitled to receive all reports and publications of the Association.

ARTICLE IV.

HONORARY MEMBERS.

The Council may elect foreign economists of distinction, not exceeding twenty-five in number, honorary members of the Association. Each honorary member shall be entitled to receive all reports and publications of the Association.

ARTICLE V.

OFFICERS.

The officers of the Society shall consist of a President, three Vice-Presidents, a Secretary, a Treasurer, a Publication Committee and a Council.

ARTICLE VI.

COUNCIL.

1. The Council shall consist of an indefinite number of members of the Society, chosen, with the exception of the original members, for three years. It shall have power to fill all vacancies in its membership, and may add to its number.

2. It shall elect the President, Vice-Presidents, Secretary and Treasurer, which officers shall constitute an Executive Committee with such power as the Council may entrust to it.

3. The Council shall organize itself into a number of standing committees upon the various lines of research undertaken. These committees shall prepare reports from time to time upon such subjects relating to their respective departments as they may select, or as may be referred to them by the Council. These reports shall be presented to the Council at its regular or special meetings and be open to discussion. All papers offered to the Society shall be

referred to the appropriate committees before being read in the Council.

4. The Council shall have charge of the general interests of the Society, and shall have power to call meetings and determine what reports, papers or discussions are to be printed, and may adopt any rules or regulations for the conduct of its business not inconsistent with this constitution.

5. The Council shall elect a Committee on Publications, which shall consist of five members, so classed that after the first election one member's term shall expire each year. This committee shall have charge of and responsibility for the scientific publications of the Association.

## ARTICLE VII.

### AMENDMENTS.

Amendments, after having been approved by a majority of the Council, may be adopted by a majority vote of the members present at any regular meeting of the Association.

## *By-Laws.*

---

1. The President of the Association, who shall be *ex-officio* a member of the Council, shall preside at all meetings of the Council and Association, and perform such other duties as may be assigned to him by the Council. In case of inability to perform his duties, they shall devolve upon the Vice-Presidents in the order of their election, upon the Secretary and Treasurer, and upon the Chairmen of the Standing Committees, in the order in which the committees are mentioned in the list.

2. The Secretary shall keep the records of the Association, and perform such other duties as the Council may assign to him.

3. The Treasurer shall receive and have the custody of the funds of the Association, subject to the rules of the Council.

4. The following Standing Committees shall be organized :

- (1). On Labor.
- (2). On Transportation.
- (3). On Trade.
- (4). On Public Finance.
- (5). On Industrial and Technical Education.
- (6). On Exchange.
- (7). On General Questions of Economic Theory.
- (8). On Statistics.
- (9). On Teaching Political Economy.

The Executive Committee may appoint such special committees as it may deem best.

5. At any meeting called by the general summons of the President, five members shall constitute a quorum.

6. Papers offered for the consideration of the Council shall be referred by the Secretary, each to its appropriate Committee.

7. In order to encourage economic research, the Association proposes to render pecuniary assistance in the prosecution of the same, and to offer prizes for the best monographs upon selected topics. It stands ready to accept and administer any fund placed at its disposal for either purpose.

8. The Executive Committee shall have power at any time to add new members to the Council.

9. The Executive Committee shall assign all members of the Council to one of the Standing Committees, and shall appoint the Chairmen of the Committees.

10. It shall be the duty of the Chairmen of the respective Committees to organize and direct the work of the same, under the general control of the Council.

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---

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Bryn Mawr College.

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<sup>1</sup>Died April 13, 1890.

<sup>2</sup>Died January 3, 1892.

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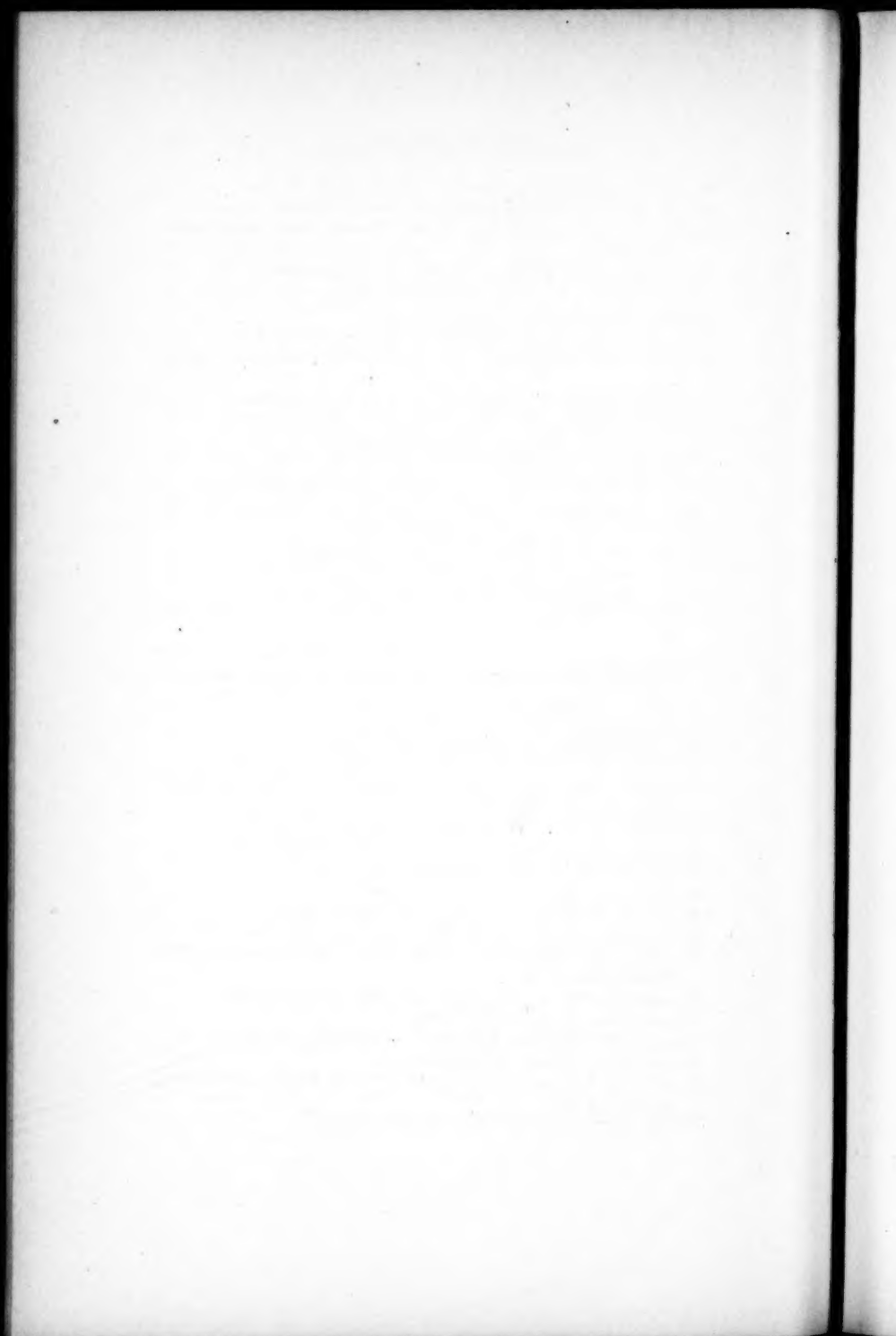
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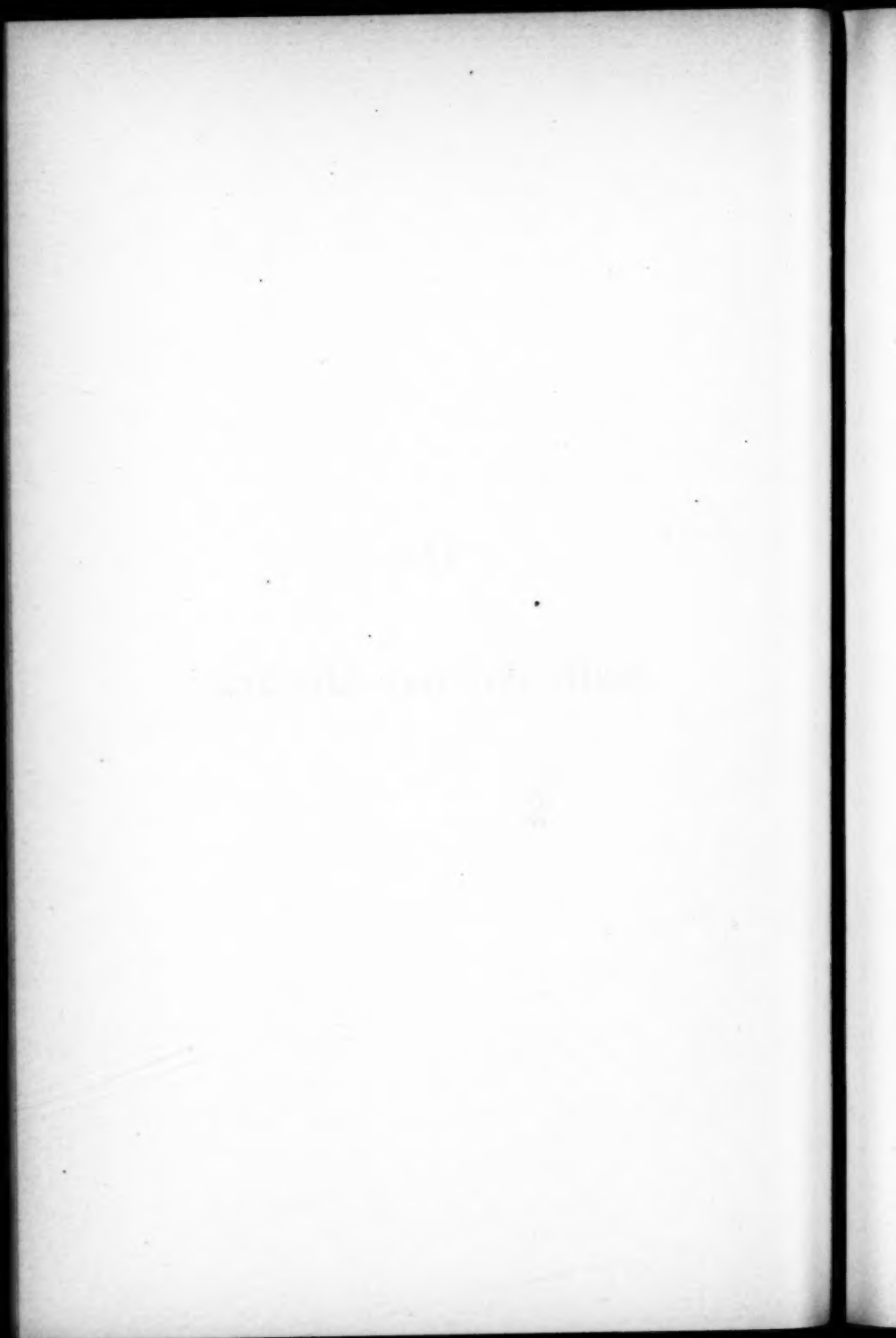
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The  
Sixth Annual Meeting



## The Sixth Annual Meeting.

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The sixth annual meeting of the American Economic Association was held at Chicago, September 12, 1893. Owing to the fact that the International Statistical Institute, on the joint invitation of the American Statistical Association and the American Economic Association, was to hold its meeting at the same place and time as had been previously planned for the meeting of the American Economic Association, September 11-15, it was decided to limit the sessions for the reading of the papers of the latter to one day, September 12.

The unfortunate absence of the President, Professor Charles F. Dunbar, on account of illness, necessitated the omission of the session set for the evening of September 11, which was to be devoted to his address. The address will be printed later in the publications of the Association.

The sessions of the next day were devoted to the reading of papers and discussions upon them, as given in abstract in the following pages.

### COUNCIL MEETINGS.

Three sessions of the Council of the Association were held during the time of the annual meeting, Dr. Richard T. Ely, First Vice-President, presiding in the absence of the President. In addition to the regular routine business of the Association, the fol-

lowing actions were taken, which will be of general interest to members:

Ten gentlemen were added to the list of members of the Council, viz.: Mr. Horace White of New York, Dr. E. R. L. Gould of Johns Hopkins University, Dr. William Z. Ripley of the Massachusetts Institute of Technology, Professor H. H. Powers of Smith College, Professor A. C. Miller of the University of Chicago, Mr. N. O. Nelson of St. Louis, Professor David Kinley of the University of Illinois, Professor Charles H. Hull of Cornell University, Dr. Edward T. Devine of the University of Pennsylvania, and Dr. Emory R. Johnson of the University of Pennsylvania.

The Publication Committee was given power to have stereotype plates made of such publications of the Association as should seem to require preservation in that form.

It was ordered that hereafter the report of the proceedings of the annual meeting of the Association be not made one of the regular monographs, but that it be printed in the same style of page and type, in order that it might be bound with the monographs if desired.

It was ordered that hereafter the names of all Ex-Presidents of the Association be printed in connection with the list of officers.

It was ordered that the names of all members of branch associations over one year in arrears in their dues be dropped from the rolls.

The Publication Committee was authorized to make such reasonable outlay for plates, diagrams and tables as in their judgment are necessary in connection with the publications of the Association.

The sum of \$600, or such larger sum as the Executive Committee might deem necessary, was appropriated to pay for clerical assistance to the Secretary and the Chairman of the Publication Committee.

The next annual meeting of the Association was fixed at Columbia College, New York, during the holiday season of 1894.

The following officers were elected for the ensuing year:

President, J. B. Clark, Ph. D., of Amherst College; Vice-Presidents, Simon N. Patten, Ph. D., of the University of Pennsylvania; Richard T. Ely, Ph. D., LL. D., of the University of Wisconsin; Richmond Mayo-Smith, Ph. D., of Columbia College; Secretary, Jeremiah W. Jenks, Ph. D., of Cornell University; Treasurer, Frederick B. Hawley, A. M., of New York; Publication Committee: H. H. Powers, A. M., of Smith College, Chairman; H. C. Adams, Ph. D., of the University of Michigan; F. W. Taussig, Ph. D., of Harvard University; F. H. Giddings, A. M., of Bryn Mawr College; H. W. Farnam, A. M., of Yale University.

## Treasurer's Report.

1892.	Dr.	
Aug. 25,	To Cash on hand.....	\$1,790.17
1893.		
Sept. 13,	" Amount received from subscribers.....	91.80
" "	" " " " sale publications.....	847.45
" "	" " " 3 annual dues, 1889-90..... \$	9.00
" "	" " " 13 " " 1890-91.....	39.00
" "	" " " 45 " " 1891-92.....	135.00
" "	" " " 341 " " 1892-93.....	1,023.00
" "	" " " 76 " " 1893-94.....	228.00 1,434.00
" "	" " " 2 " " S.W. Branch,	3.00
		<u>\$4,166.42</u>

1893.	Cr.	
Sept. 13,	By Publication expenses.....	\$1,272.63
" "	" Expenses of Publication Committee,	6.84
" "	" Work and expenses in Secretary's	
	Office.....	949.80
" "	" Expenses Treasurer's Office.....	101.18
" "	" Miscellaneous expenses .....	31.62 2,362.07
Sept. 13,	Cash on hand this date .....	<u>\$1,804.35</u>

F. B. HAWLEY,

*Treasurer.*

Audited and found correct.

F. W. TAUSSIG,

HENRY W. FARNHAM,

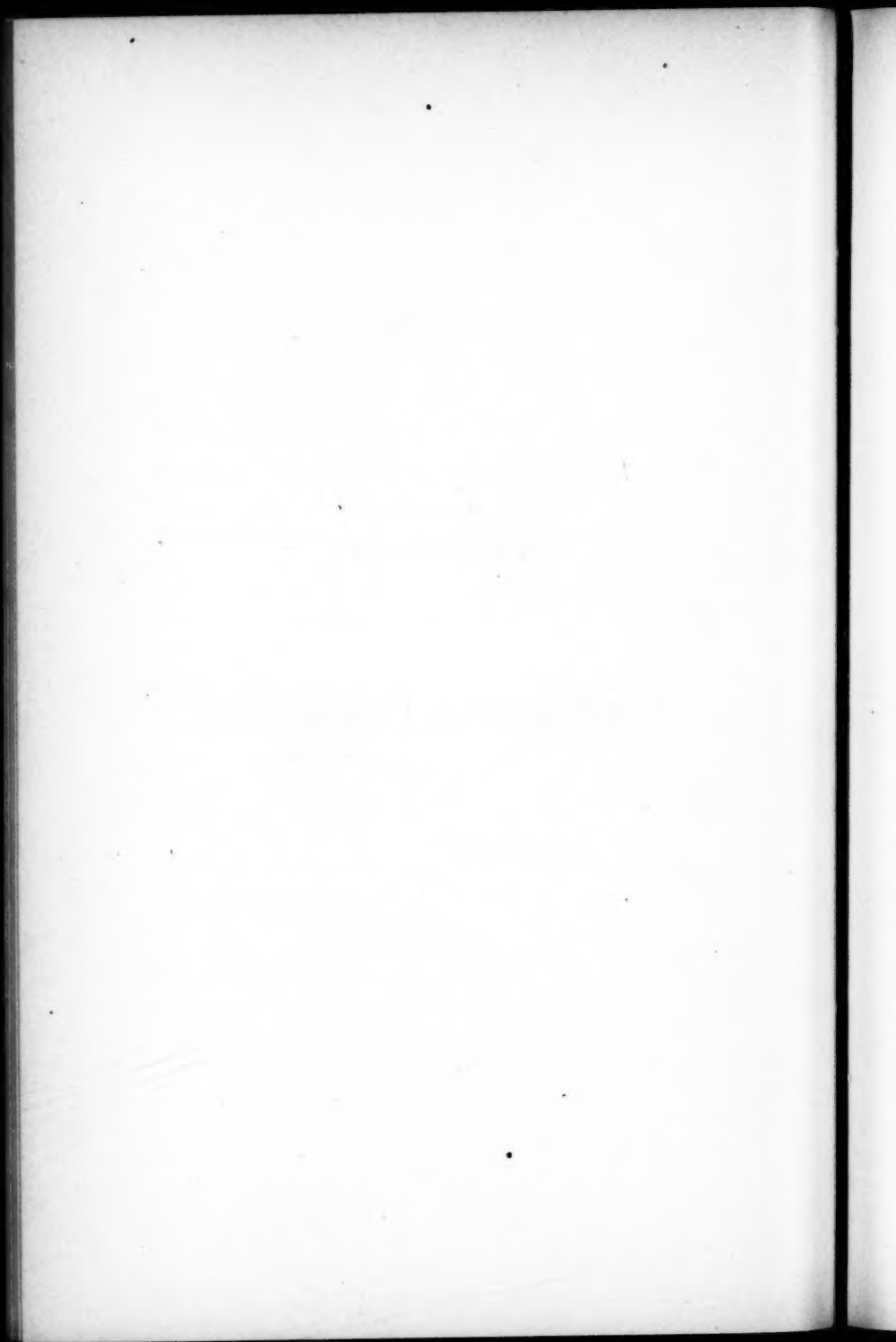
SEPT. 13, 1893.

*Auditors.*

ABSTRACTS

OF

Papers and Discussions.





## THE VALUE OF MONEY.

BY GENERAL FRANCIS A. WALKER OF THE MASSACHUSETTS INSTITUTE  
OF TECHNOLOGY.

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The object of this paper is to enquire whether the extreme extension of credit, which has been effected in our day, has in any degree impaired the validity of the proposition that the value of money, the price of goods, depends on the demand for and the supply of money, that is, of the actual circulating medium of exchange. The reason for writing this paper is found in the frequent references by journalists, men of affairs, and even professional economists, to the small amount of money used in banks and clearing-houses, as if the modern system of credit had made the money-supply a matter of small consequence or of no consequence.

The writer begins with the consideration of a primitive community where all goods are assumed to be sold for and bought with money, and applies to this case the familiar proposition regarding the value of money, using Mill's definitions of demand and supply. Here he finds that proposition to be unmistakably true. He then makes four successive changes from the industrial condition assumed:

First, the consumption of a large part of the product by the respective producers;

Second, a large use of barter;

Third, the introduction of credit, but without the transference of obligations;

Fourth, the transferability of obligations, leading to a vast cancellation of indebtedness, especially in the banks.

The writer finds that by none of these changes in the commercial process is the validity of the traditional proposition impaired. Such changes greatly affect the demand for money; but it is still true that the demand for money, be that greater or less, does, in connection with the supply of money, determine prices. It is the goods which are exchanged for money, and not the goods consumed at home or bartered in direct exchange, which constitute the demand for money. The introduction of credit, and the resulting cancellation of indebtedness, is essentially the extension of barter. Two sales on credit, which, in time and amount, precisely offset each other, in the bank, are equivalent to one exchange of equal amount, in barter. The writer declines to accept the view of Lord Overstone and Professor Sidgwick that bank deposits, or bankers' liabilities, are money. They are simply an instrumentality for saving the use of money.

The writer takes his last step in supposing that the credit system has been carried to its extreme, so that only a minute fraction of the aggregate transactions of the banks and clearing houses is settled in cash. Does this diminution in the use of money in any way impair the validity of the proposition that it is *the money used* which determines prices? Let the credit system become ever so gigantic, does it carry the value of money with it, by a species of gravitation? In such a situation, does the money-

supply cease to be of consequence? The writer does not find these things to be so. In the field of wages and of retail trade, money still gets that room to operate which makes its quantity determine prices. This would be so were not a dollar of money ever used inside the banks and clearing-houses.

In closing, the writer cites the recent commercial distress and the partial suspension of production in the United States, due to the withdrawal of a portion only of the circulating notes, as a striking proof that the money-supply is still just as important as it ever was, after all that the organization of credit can do.

*Discussion.*

Mr. Atkinson: The point on which I take issue with General Walker is this. He has, as I recollect it, given as a definition of money, "anything that passes from hand to hand in the settlement of transactions." I think he evades his own definition by counting out what I call titles to money, such as checks drawn against bank deposits or bank credits, and other instruments of like kind. It is by such instruments of exchange that the larger portion of business transactions is settled. He says a bank note is money, but that a check drawn against a bank deposit is not. What is a bank note except a cashier's check upon a bank deposit? I think we need to make a distinction, and I should limit the term money to that which is current everywhere in a given country because it is sustained by the force of a legal tender act; and I should put into a different category those instruments of exchange which are of the nature of titles to money, but are not themselves lawful money. A bank note is a title to money,

but it is not in itself money according to any true discrimination, nor is it legal tender, because it cannot be forced upon a creditor. A title to money is an instrument of exchange that may be offered but which, if refused, must be followed by a tender of that which is lawful money. I think you will observe that whatever attempt may be made to extend the meaning of the word "money" after the methods which General Walker has adopted, you do so at the cost of giving a vague definition, and at a loss of precision in the use of language.

My own view is that any attempt to give General Walker's broad extension to the meaning of the word "money" will fail. In a scientific discussion we shall come back to a limit in the use of the word "money," confining it to the unit of redemption or to the unit or standard of value as it may be established. I admit that there may be a unit of money of redemption that is lawful like the depreciated greenback, which may not be true to the unit or standard of value. Such money is bad money—but it is money. I have observed, in the long transactions with which I have been connected in fifty years of business life, that every transaction is finally brought to a unit or standard of value which may be neither money nor a legal tender, but which is yet available for the purpose of discharging debts and buying goods anywhere. That unit is a grain of gold or its various multiples measured by the quantity which there may be in each and every kind of coin.

The attempt to regulate the value of money according to the Constitution of the United States is of necessity exerted only in determining the value

of foreign coins that are received at the custom-house; and that determination resolves itself into finding out what is the exact proportion of the pure gold or silver in each foreign coin to the only present lawful unit of value, the gold dollar of the United States. This marks the limit of legislation and the limit of the power of the government.

I heartily approve Cernuschi's definition, which I quote from memory: "That coin only is good money which is worth as much after it is melted as it purports to be worth in the coin."

My own definition of good money is that which is accepted everywhere, without the force of law, in making purchases or paying debts. You will observe that in all the international commerce of the world, whatever may be the lawful or legal tender money of either country which shares in it, the final settlement is ultimately brought to the unit of one hundred and thirteen grains of gold, that being the quantity which is defined by the name of a pound sterling.

I agree with much that General Walker has said about not taking the clearing-house transactions as a measure or standard of business. There are many titles to property given and settled outside the clearing-house, and many exchanges in the clearing-house where the property itself does not pass. I think we may attain a better standard of the true volume of transactions of this country by working from the individual to the concrete. If the product of this country at its final point of consumption comes to what fifty cents a day will buy for each man, woman and child in the community—and that you will observe is a very low estimate of the cost of sub-

sistence — then the primary value of the annual product of this country is over \$12,000,000,000 this year. If you will observe the coat which you wear, or take note of what you ate for breakfast this morning, trace back each of the elements to its source and take note of how many transactions there must have been before you could put the cloth upon your back or the food into your mouth, you will find that for every fifty cents' worth of product consumed there must have been one dollar and fifty cents' worth of previous transactions.

There are very few articles which enter into general consumption that are not bought and sold in their elements or in their final form twice, thrice or many times over. At fifty cents' worth a day, bought and sold three times over, the actual business transactions of this country, in goods only, come to \$100,000,000 for every day in the year. The necessary supply of the people of this country with food, fuel, shelter and clothing, upon a basis of fifty cents a day, implies money transactions to the extent of \$100,000,000 a day, or about \$36,500,000,000 a year. One must deal in these small units of consumption in order to comprehend the gross transactions, unless one possesses the faculty of thinking in proportionate black lines instead of figures.

When General Walker attributes the crisis through which we have passed, or are now passing, to a scarcity of the instruments of exchange, I differ with him. It happens that in the business which I supervise it becomes necessary for me to comprehend what is being done in about sixteen hundred of the great factories and workshops of the United States. I share in a system of mutual insurance on

six hundred and fifty million dollars' worth of capital invested in manufacturing establishments. The value of the products of these establishments comes to a thousand million dollars a year, or more. If these goods are computed at their retail prices, then the work which I supervise gives me comprehension of how at least a tenth part of the product of the United States is disposed of, and I am obliged to know all about these establishments in the conduct of my business. There has been difficulty, there has been an approach to a great commercial crisis, there has been depression; but when General Walker speaks of factories as having been stopped by thousands, it is a terrible exaggeration, corresponding to the exaggerated view that is taken of clearing-house transactions. You may count the great factories and workshops that have been stopped a short time by hundreds, or even only by tens, not by thousands. You may speak of the discharge of operatives by thousands, not by hundreds of thousands; not very many thousands at that, and probably for a short time only. When confidence was partly restored throughout the country, even before final action has been taken in the House of Representatives, mills and workshops began to start, and, in my judgment, it will not be more than three or four months before all will be actively engaged in filling up the gap in the supply of goods due to the present stoppage. The general business of the country has not stopped; the consumers' demand is very active; the business community has improvised a form of credit in clearing-house certificates on a solid basis, and by that they have surmounted many of the purely imaginative doubts and difficulties which have produced



lack of confidence. Confidence is slowly being restored, and with it transactions have been renewed and mills will soon be occupied as fully as before. The general conditions of this country are conducive to a high state of prosperity. This crisis through which we are passing is a *non-commercial* crisis, due to *mis-legislation* and to the want of comprehension of true monetary principles.

#### THE RELATION BETWEEN INTEREST AND PROFITS.

BY PROFESSOR ARTHUR T. HADLEY OF YALE UNIVERSITY.

1. Profit, and not interest, is the return which society gives to the capitalists as a class. Interest is paid by one group of capitalists to another; it is a part of a redistribution of profit rather than a co-ordinate element with it.

2. The possession of capital gives the right to control industry, under modern legal systems. Interest is paid for the transfer of such control. The borrower takes the control, with the attendant chances of gain or loss which it involves; the lender abandons the control and commutes his possible profit for a fixed rate of interest. Whether this rate absorbs a large portion or a small portion of the total profit will depend upon the relative numbers of investors who desire control, and of those who are willing to commute.

3. This commutation is allowed and justified, not because of any inherent productivity of capital, but because it helps the natural selection of the most competent employers and the best processes, and the



elimination of the less competent employers and worse processes.

4. Interest on long-time investments and permanent improvements bears the same relation to rent that interest on short-time loans does to profit. It is essentially commuted rent.

5. There is, of course, a general rate of interest, while there is no such thing as a general rate of profit or rent in anything like the same sense. Commutation of profit in different employments must tend to somewhat the same rate, because the transfer of capital from one to another is easier than the transfer of brains. But this transfer is not nearly so complete or so easy as is commonly supposed. The rate of interest is separately determined in a large number of commutations, imperfectly connected with one another, instead of being, as has been commonly assumed, collectively determined in a general loan market and then modified in specific cases to suit exceptional conditions.

#### *Discussion.*

Professor Franklin (of Johns Hopkins): I am not a member of the Association, and I do not know whether it is considered desirable that there should be any discussion of the paper. However, I should be glad to be permitted to make a few remarks. In the first place, if I may be allowed to ask Professor Hadley a question, which ones of the great English economists have justified interest in the sense which seems to have been implied in the early part of your address? In what way have they asserted that interest is equitable or justifiable? What economists have, in an emphatic and unmistakable way, asserted

that it is just in anything like the sense of divine justice, pure justice,—that it is just that interest should be given, as it is, on account of abstinence? In considering any existing economic institution, such as the payment of interest, there are three chief aspects of the subject to be inquired into. What is its historic origin? What are the quantitative laws regulating the phenomenon? Is it ethically right that the institution in question be permitted to continue to exist? It is the second of these questions upon which the labors of the English economists were centered, and we must not suppose them to be dealing with the third except when they explicitly state that they are.

Professor Hadley: In answer to Professor Franklin's question as to who has used these theories, I can best refer him to the work of Dr. Böhm-Bawerk, which has been translated into English, wherein he gives a long list of both the abstinence theory and of the productivity theory advocates. Mill starts out with the fundamental theory regarding capital that it is the result of saving, and speaks of the productivity of capital as the cause of interest.

Professor Franklin: I am very well aware of that; of course any one who has read Mill knows that he holds that interest is the result of saving; but that saving justifies interest is another thing. Even just now, as Professor Hadley has approximately quoted Mill, he does not use the word "justification." Even if he did use the word justification, and I doubt whether it is found in Mill in that connection, more than a single word should be quoted. There is nothing, so far as I know, in the express, emphatic doctrine of the English economists which justifies

interest. English political economy is nothing if not emphatic; it is all emphasis, and there is nothing in the writings of the great English economists, so far as I can remember, which distinctly implies that the bestowal of interest upon individuals is an act of justice at all; and nothing less than this, it seems to me, would warrant the criticism made in the early part of Professor Hadley's address. That popularizers of English political economy, journalistic writers, have made such assertions, is doubtless true, and the socialists have found this tool ready to their hands; but if it was due to misconception one can only say that there is no scientific doctrine at all, no doctrine intended for intelligent readers, which is not subject to misconception by persons who approach it without the proper mental equipment or the proper spirit.

Professor F. W. Taussig: I remember very distinctly a passage in Mill's "Political Economy" in which he says in so many words that the proposition that capital is the result of saving has no moral connotation whatever. It simply serves to explain how capital arises and why interest is paid. It is not to be taken as a defence or justification of interest. And I think a careful reading of Senior's presentation of the same doctrine will show that he also was concerned with the simple scientific explanation of the phenomenon of interest, and not with the defence of it against attacks. No doubt the doctrine has often been misused, as many economic doctrines have been; it has been made to do duty against the attacks of the socialists. But it is as an explanation of the phenomenon of interest, not as a defence of the institution, that it deserves the serious attention of economists.

Further, I confess that notwithstanding what Professor Hadley has said in his paper, the idea of abstinence, of saving, or waiting, or whatever name you choose to use, seems to me one with which the economist cannot dispense. I may say, too, that the discussion of this subject, and the attempt at the refutation of Senior's reasoning, in the series of chapters which Professor Böhm-Bawerk gives to Senior in his "Capital and Interest" is unsatisfactory, and indeed rests on a fallacy. Briefly, in order to understand any exchange, we must have two things. We must have the sacrifice on the one hand by some one, and we must have a gain on the other hand by some one else. This does not hold good, of course, of free natural agents which are monopolized; here there is no element of sacrifice; but it holds good of every other act of exchange. There must be these two elements, the sacrifice on the one hand, the gain on the other hand. The element of sacrifice helping to explain interest must be found, I think, in this old-fashioned idea of saving or abstaining or waiting. It is the other element in the case which the classic economist considered least satisfactorily, and which is most in need of further elucidation. The nature and cause of the surplus secured by him who is commanding capital need further consideration. To my mind, too, it is in discussing the nature of that gain, rather than the character of the sacrifice, that we shall discover the causes regulating the rate of interest, as distinguished from the causes explaining the existence of interest.

What Professor Hadley has said in regard to the relation of interest and profits is true and valuable, and points to the direction in which we shall have to

reconstruct our theory of interest. Interest should not be treated as an independent element in distribution, but as a part of what it used to be the fashion to call gross profits. The command of capital enables a surplus to be earned; part of that surplus is parcelled off, by the bargain between him who directs the use of the capital and him who supplies it, and becomes what we call interest. The fundamental problem is why the gross surplus exists. To understand that, we must consider chiefly the causes determining the efficiency of labor, and the manner in which tools and machinery, or preparatory labor, affect efficiency. The continued progress of invention and of the arts is necessary to the maintenance of interest, if the accumulation of capital continues.

Professor Giddings: I was extremely interested in Professor Hadley's paper. It seems to me that he has given attention to a phase of the question that has been too much neglected, and one in regard to which we may hope for further studies that will be of extreme value. At the same time, I think that we ought to remember that in the treatment of interest in our text-books, for many years past, there has been a sharp distinction between two elements, or factors, in so-called commercial interest. Pure economic interest has been recognized as one thing, while the element of risk, for which a considerable payment is always included in commercial interest, has been recognized as another thing. Economic interest has been recognized as distinctly due to economic causes; risk as due to sociological causes. Now it seems to me that what Professor Hadley has done is to point out that there is another very large and very important sociological factor in commercial interest.

Interest, as a commercial payment, is, among other things, a commutation of profits and of rent; it is a means of securing the natural selection of the best employers. This also, then, like risk, is an important factor in commercial interest. But in economic theory ought we not to distinguish carefully between the strictly economic elements and the sociological elements, and recognize that there is in the payment of commercial interest a premium on risk, a commutation of profit or rent, which is made in the process of the natural selection of employers, and also—and Professor Hadley did recognize this in his paper—what he called “minimum” interest, and to which I think we should confine the term “interest” when used apart from modifying expressions, the payment that is made as the difference between present and future goods? I think that in the analysis which has distinguished the values of present from the values of future goods we have made a great advance.

#### THE SCOPE OF POLITICAL ECONOMY.

BY PROFESSOR S. N. PATTEN, OF THE UNIVERSITY OF PENNSYLVANIA.

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The scope of political economy has not received that attention it deserves because of the fact that it has always been discussed in connection with problems relating to methodology. The limits of the science have been due to peculiar conditions arising in the past and should be treated as an historical rather than as a logical problem. With other his-

torical conditions the present limits accepted of the social sciences would not have been thought of.

The scope which Adam Smith gave political economy was broad, including problems of social progress as well as those of static society. The influence of the French Revolution on English, thinkers, however, caused them to separate these two parts of economic theory. In politics and in many social matters these thinkers were liberal, but the strong reaction against the outrages of the French Revolution caused their conservatism to show itself in economics. The theories of Malthus and Ricardo are mainly an expression of the reactionary tendencies. On the other hand the liberal spirit showed itself most clearly in the utilitarianism of Bentham. The reforms in legislation and morals which he proposed were largely based upon economic considerations and formed a theory of social progress. Utilitarianism and economics thus became separated, and two sciences were created where there should have been only one. They differed not in the field they occupied nor in the method of procedure but in the unit of measurement. Utilitarianism measured subjectively in units of satisfaction what economics measured objectively in units of material wealth.

The recent development of economics has done much to break down the limits which have separated it from utilitarianism. The theory of marginal utility has accustomed economists to subjective measurements of wealth. Units of pleasure and pain have displaced units of material wealth and of a day's work.

The scope of economics has also been enlarged by the development of a theory of the consumption of wealth, and thus problems of social progress are



made a part of economic theory. Material progress was measured by the increase in the quantity of wealth. The essence of social progress, however, is to raise the margin of consumption, to increase the utility of the goods we have, instead of striving for the mere increase in the quantity of goods each part of which would have a lower degree of utility.

When these facts are clearly seen economics becomes the same as the science of utilities. Its theory has at its basis the calculus of pleasures and pains upon which Bentham based his system. But the change affects utilitarianism as deeply as it has economics. It shows that a conscious calculation of pleasures and pains is confined to positive utilities. They alone can be added and subtracted. The absolute utilities are out of its realm and belong to the true field of ethics.

In this way utilitarianism which began as an abstract theory of utilities has become more concrete, and economics which began as a concrete theory of material wealth has lost most of its concrete forms and has become a theory of insatiable wants. The two sciences, therefore, which were separated artificially by past conditions became identical in scope and method and should be merged into one science.

#### THE GENESIS OF CAPITAL.

BY PROFESSOR JOHN B. CLARK, OF AMHERST COLLEGE.

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A recent Austrian theory makes interest to be a premium on goods for present consumption, as compared with goods of like kind and quantity for future consumption. This view cannot be valid



unless capitalists actually compare the subjective value of present goods with that of future goods in all respects similar. This they do not do.

A typical capitalist sets aside from present use a certain amount of wealth expressible in money, intending never to spend the principal so accumulated. He intends to enjoy to the end of his life the annual earnings of his capital, and to bequeath to his descendants the privilege of enjoying them in perpetuity. What the capitalist foregoes is whatever the principal of his savings would have bought for himself; and what he gains as an offset for this abstinence is whatever the annual earnings will buy for himself and for his heirs. The goods sacrificed are different in kind and quantity from the goods that are gained.

Some persons save capital intending later to spend it. They lay aside sums to be used in periods of helplessness or old age. In acquiring the capital they go without goods that to them are luxuries; and in spending it they buy necessities. The difference between the things that they might have bought now and those that they expect to buy later affords the incentive to saving.

Neither the true capitalist, who creates permanent capital, nor the *quasi*-capitalist, who creates a fund and then consumes it, has any occasion to compare the utility of present goods with that of future goods *of like kind and quantity*.

Professor v. Böhm-Bawerk has tried to use the concept *capital goods* as for scientific purposes identical with that of *capital*; and the basing of interest on goods present and future is the first result of this attempt. What men really compare is present *sums*

with future ones. A capitalist compares one present sum with an endless series of smaller sums accruing in the future.

Capital consists in goods; but a proposition that is true concerning capital is often the opposite of the truth concerning the goods. A water-fall consists of particles of water; yet what is said of the fall cannot be said of the water. The fall is stationary; the particles move. The fall is perpetual; the particles of water pass away to the sea and ultimately evaporate. So capital is perpetual; but the things that at any moment compose it soon pass away.

Capital goods have periods of production. It is possible to mark the instant when a particular bit of matter begins to take a usable shape, and the instant when it renders its last service to production. We may call the interval between these dates its period of production. Yet true capital has no periods. As a whole it does its work with no traceable beginning and no prospect of cessation.

Capital goods interpose periods between labor and the culling of its fruits. True capital annihilates those intervals, and makes the reward of labor to come immediately. A quantity of water now flowing into the upper end of a reservoir may occupy a month in passing through it and reaching the wheel at the lower end. This interval may be regarded as its period of production. Yet if the reservoir be full the inflowing water causes an immediate overflow, and moves the wheel at once. The full pond annihilates the interval between the inflow and its effect.

It may be a year before the hide of an ox will "ripen" into coarse shoes. Labor now expended on the hide will not produce at once finished shoes *made*

*of that particular material.* Through the aid of capital it produces shoes immediately. The permanence of capital means that in the shoe-making industry there is kept a uniform quantity of raw hide, of tanned leather, and of shoes in all stages of advancement. The furnishing of new raw hide aids in the forward movement of all this material, and creates, as it were, an immediate overflow of finished shoes at the end of the series.

The creating of capital is the securing of a part of this perpetual overflow of usable goods. The process begins at once and ends,—never. The fruits of it accrue chiefly to heirs or successors of the original capitalist. What this capitalist has to mentally compare, when he saves his fund from consumption, is the benefits to be obtained from immediately spending the fund itself, and those to be had from the spending of the endless series of earnings of the fund.

It is possible to tell, in a rude way, what the fund would have been spent for if it had not been saved. It is impossible to tell what the earnings of the fund will be spent for.

It is possible to rudely gauge the benefit to be derived from the things that might have been procured with the fund itself, since this benefit would accrue to the owner, who makes the estimate. It is impossible to measure the benefit that will accrue from the spending of the earnings, since they will be used mainly by heirs and successors of the man who makes the estimate.

There is no difficulty in resolving a benefit to the capitalist himself into a motive for action on the part of the capitalist; but there is grave difficulty in re-

solving benefits accruing to others into a motive for action on one's own part. The strength of the motive for accumulating capital depends on a man's reason and on his altruism. Accumulation stops when a definite present benefit accruing to a man himself constitutes a motive for action outweighing the influence of another motive afforded by the prospect of an endless series of smaller benefits incapable of exact measurement and accruing mainly to the successors of the man whose action is to be influenced.

THE WAGES-FUND AT THE HANDS OF THE GERMAN  
ECONOMISTS.

BY PROFESSOR F. W. TAUSSIG, OF HARVARD UNIVERSITY.

Professor F. W. Taussig, of Harvard University, presented a paper on the treatment of the Wages-Fund doctrine by German economists. After noting the fact that English economists have paid little attention to the manner in which the Germans have discussed the theory of wages, the development of the wages-fund doctrine in England was briefly sketched, with special reference to Adam Smith and Ricardo. When fairly developed, the doctrine was attacked in 1834 by Hermann in Germany, long before English writers thought of doubting it. Hermann did not deny that wages were paid out of capital, but said that capital was only an intermediate source, and that the real ultimate source from which wages were paid lay in the income of the consumers who bought the products made by the laborers. This doctrine, that the real source of wages lies in consumer's income, has been almost universally accepted

by German economists as a substitute for the wages-fund theory. Some additions to it were made by Brentano in 1871, but the fundamental doctrine was accepted by him. Various contemporary German economists were considered, and their presentation of the theory of wages was shown to be a combination of the views of Hermann and Brentano.

Professor Taussig objected to this theory of the Germans that it led to reasoning in a circle, so far as general wages are concerned. Consumer's income was said to be the source of wages. But wages themselves were a very important part, probably the most important part, of consumer's income. Consequently wages, by this theory, were made to depend simply on wages. The theory made no attempt, and could give no aid, in determining how much of consumer's income was wages. Yet this was the precise problem of which a solution was sought. Consumer's income, and the direction in which it is spent, is a very important factor,—indeed, is *the* important factor,—in determining the wages of one set of laborers as compared with another. It determines whether the demand for labor shall be in one direction or in another, and whether particular groups of laborers shall get high or low wages. But it has no effect in making the general range of wages high or low. Some German economists are aware of this difficulty in their theory of wages, but it holds its place nevertheless in their books,

In conclusion, it was suggested that the real source of wages was to be found in the recurring supply of finished and consumable commodities which was being constantly produced and consumed. All hired laborers got their share of these commodities and

their real wages, by having money turned over to them by capitalists and employers. The wages-fund doctrine was right in looking at the advance of funds from capitalists to laborers as the first step in the process by which wages were determined. It needed to be corrected and supplemented by a consideration of the causes determining the supply of finished goods on which the laborers spent their money wages.

*Discussion.*

Professor Bemis: I desire to say just a few words. The writer of this paper, if I understood him aright, denied that a general rise of wages may be had at the expense of the consumer. I differ from him, because, as stated in his paper, there are consumers who are receivers of rent and profits and pensions, and other fixed sources of income, who are not themselves wage-workers, and therefore some of the burdens of an increased price due to increased demands of the workers can be shifted upon other consumers than the wage-earner.

I think we must give more and more attention to the growth of a large income-receiving class who are not in the competitive field, but are possessors of monopolies of one kind or another. They are also consumers, and the wage-earning class gets a considerable rise of wages through the increase of price, or perhaps more unusually, through a prevention, when improvements occur, of a fall in price of articles consumed by this class. This is especially true where the consumption is general, as the use of houses. Undoubtedly some of our recent rise in wages, or shortening in the labor day in the building trades, has come out of that class who have recently

built houses for their own use, but whose regular income is from rent or interest or profits.

In criticising, as Professor Taussig has so well done, past theories of wages, it is of course necessary to have one's own theory. I may, therefore, be permitted to add a word more, though not so directly connected with the paper just read :

Rise of wages may come out of monopoly profits, as on street-car lines, just as a tax would do. This field of monopoly profits is rapidly extending in competitive business. Wages may rise at the expense of profits for very brief or very long periods. Only the latter possibility interests us now. With growth of wealth and other factors, interests and profits on a given capital may decline. Any further increase that does not come out of the consumer or out of monopoly profits, or, in a slight degree, in long periods of time out of general profits, must come from the increase of the product in some form. Increase of wages through increase of product may come because of the workman's increase in efficiency, but not in that way only, as so many suppose. We are sometimes accustomed, when considering the eight-hour day, etc., to speak as if any increase in the rewards of the workman must come out of the increase of production in the individual workman; and we know that it often does come that way, or in the reverse way, to-wit: the increase of wages coming first may lead to the improvement of the standard of living, or as Professor Marshall would say, the standard of "life," and that in turn to an increase of personal efficiency. I think, however, with Mr. Gunton and many others, that an increased demand by the workers for wages may result in putting a temporary



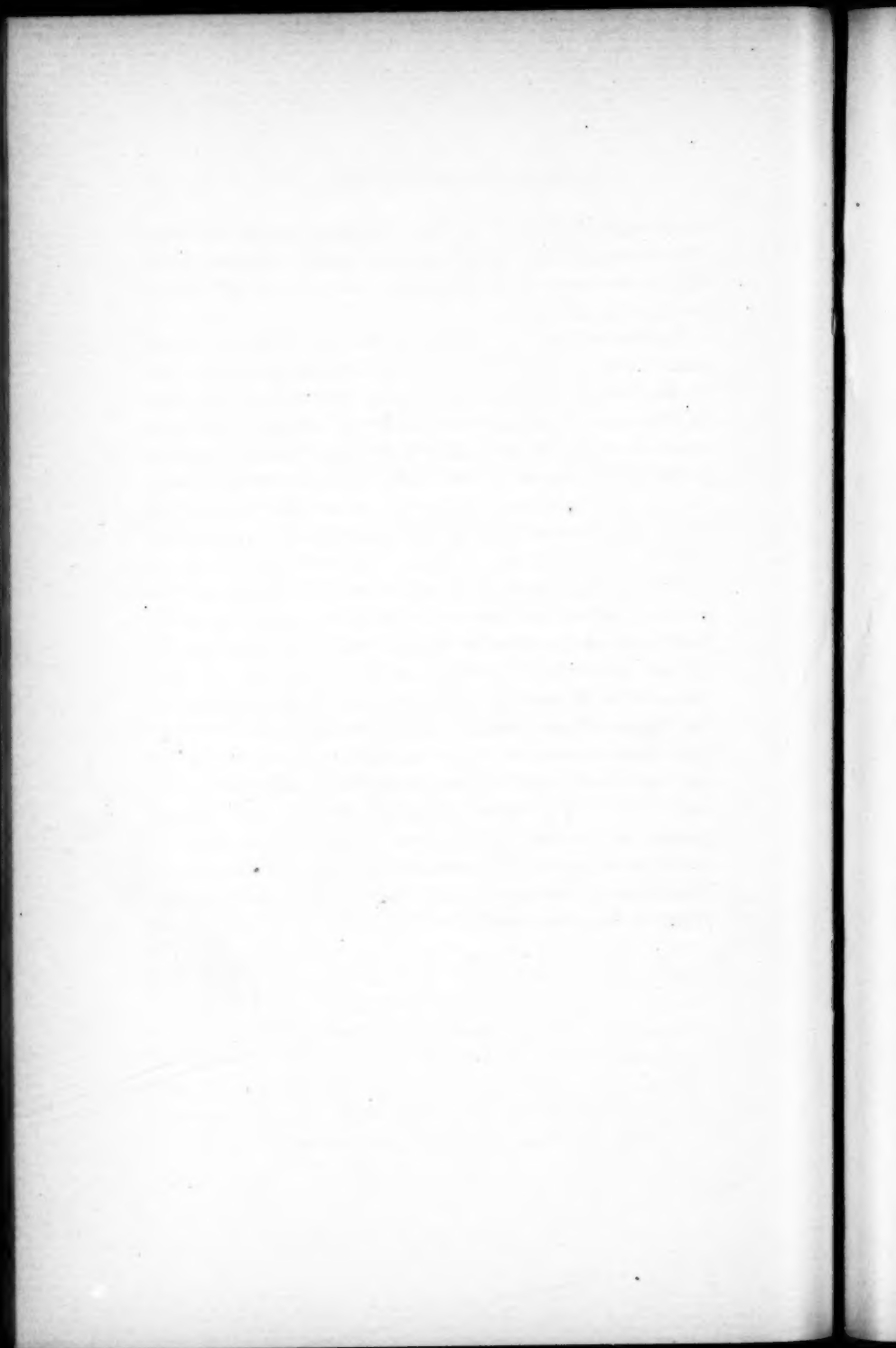
pressure upon the employer, which may induce him to perfect and utilize improvements in machinery and industrial processes. The competition between one employer and another does that all the time, but the upward pressure of the wage-worker upon the employer hastens the introduction of improved processes and with those come greater production and greater absolute wages; although it is probably true, as Professor Clark pointed out in a valuable paper before our American Economic Association in December, 1888, and published in Volume IV of its proceedings, that in case of more rapid growth of capital than of labor, the wage-earner gets a less relative, while securing a larger absolute share of the product. When we compare the slowness with which inventions are introduced when wages are low with the rapidity with which they are introduced when workmen demand higher wages, we can see how the demands of the wage-worker can sometimes be satisfied without injury to anybody.

It also seems to me as if there was great importance in the position taken by General Walker, that the general development of society leads to the making common of industrial processes and inventions after the lapse of the life of the patent, and other improvements shortening the processes of industry, and thus improvements create truly a residual product; but I cannot see, with President Walker, that it naturally goes to wages as rent goes to the landowner, but rather that it is something to be bargained for between the various factors of production, the bargain being made not with reference to the present residual product, which must go to profits, it seems to me, but with reference to a future residual product.



The wage-worker of to-day bargains with the employer, regarding his share in a future residual product to be created by the improvements and processes constantly going on.

Professor Hadley: It seems to me that no small part of our economic misunderstandings has been due to the failure to appreciate the distinction between capital and capital goods in the way which Professor Clark brought it out. The difference between Adam Smith and Ricardo in the matter of the wages-fund theory, as it seems to me, was essentially this, that Adam Smith was talking about capital, and Ricardo about capital goods. Adam Smith's definition of capital is, that part of a *man's* stock which he expects to afford him revenue. Ricardo said, Capital is that part of a *nation's* wealth which is devoted to future production. The essential feature of the wage-fund theory is that it makes wages depend on capital goods, as distinct from capital; and, further, that it assumes that those capital goods are held by the capitalist, and are coincident with capital in the true sense. By distinguishing capital and capital goods, as Professor Clark has taught us, we can do much to separate the true and the false in the wage-fund theory, and reconcile views which are apparently in hopeless conflict.



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